Compact High OPR Gas Generator

Completed Technology Project (2013 - 2021)

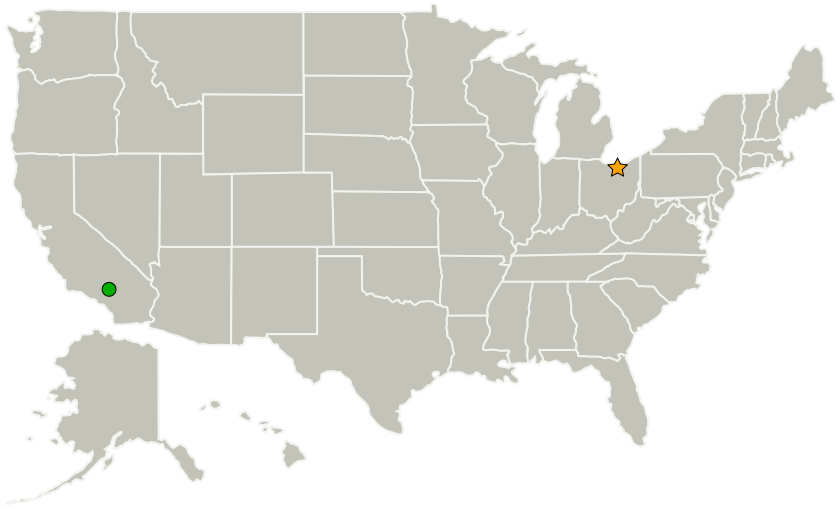
Project Introduction

The Compact High Overall Pressure Ration (OPR) Gas Generator enables reduced size/flow high pressure compressors and high temperature disk/seals that are critical for 50+ OPR gas generators with minimal impact on noise and component life.

Anticipated Benefits

Reduction of aircraft fuel burn by developing critical small core component technologies to help enable 50+ OPR small core engines (TRL4 by end of FY20).

Primary U.S. Work Locations and Key Partners



Compact High OPR Gas Generator

Table of Contents

Organizational Responsibility

Responsible Mission Directorate:

Aeronautics Research Mission Directorate (ARMD)

Lead Center / Facility:

Glenn Research Center (GRC)

Responsible Program:

Advanced Air Vehicles

Compact High OPR Gas Generator

Completed Technology Project (2013 - 2021)

Organizations Performing Work	Role	Type	Location
★Glenn Research Center(GRC)	Lead Organization	NASA Center	Cleveland, Ohio
●Armstrong Flight Research Center(AFRC)	Supporting Organization	NASA Center	Edwards, California
General Electric Company	Supporting Organization	Industry	Niskayuna, New York
Honeywell International	Supporting Organization	Industry	
Pratt and Whitney	Supporting Organization	Industry	

Project Website:

https://www.nasa.gov/aeroresearch/programs/aavp/aatt

Project Management

Program Director:

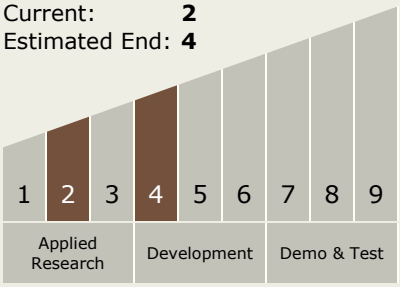
James A Kenyon

Project Manager:

James D Heidmann

Technology Maturity (TRL)

Start: **2**
Current: **2**
Estimated End: **4**



Technology Areas

Primary:

- TX01 Propulsion Systems
  - TX01.3 Aero Propulsion
    - TX01.3.5 Turbine Based Jet Engines

Target Destination

Earth